CAPS 2nd Quarter Report October, November, December 2008

Kansas Department of Agriculture Cooperative Agreement 08-8453-0014-CA

The effective dates for this cooperative agreement are July 1, 2008- June 30, 2009, Kansas fiscal year.

This report summarizes the activities conducted during the agreement's second quarter, October 1, 2008 through December 31, 2008. Each project is discussed separately below.

Infrastructure

On September 30-October, 2 the Plant Protection & Weed Control program did 3 separate exercises for emergency preparedness with the homeland security trailer. The exercises consisted of scenarios for weeds, disease and pests. Craig Webb from USDA brought his PCR equipment for the disease portion and put it through a P. ramorum test. It worked well and without any power problems. All inspectors and specialist were involved and Bill Scott and Laurinda Ramonda observed the activities.

October 14-16 was the annual Central Chapter Horticulture Inspection Society conference in Cuyahoga Falls, Ohio. On October 14, Ron Issacson from the Ohio Dept. of Agriculture (ODA) gave an update on their Emerald Ash Borer program and Greg Bartman (USDA/APHIS) spoke about Invasive Snails & Slugs. Joe Boggs (OSU Extension) talked about 20 Questions to Diagnosis and took us outdoors to give us hands on experience. Then Dr. Dennis Lewandowski (OSU Plant Pathology) talked about Hosta Virus X.

October 15 speakers were Dave Adkins (ODA) gave us an update on their Gypsy Moth Program, Dr. Jim Tew (OSU Extension) spoke about Colony Collapse Disorder and David Lentz (USDA/APHIS) talked about USDA certified Butterfly Containment Facilities. This was preparing us for the tour of the Stan Hywet Hall & Gardens.

The annual meeting had great speakers with useful information. Also many states showed slides on the evenings of October 14 & 15 about things being found when inspecting. This is always a good meeting with great information.

An Urban Forestry Workshop was held in the afternoon of October 20 in Ottawa. The agenda included talks on the Marais des Cygnes (MDC) Riparian Forestry Initiative Overview, Bi-State Targeted Watershed Grant Program Overview, Benefits of Riparian Forests, Watershed Management with Community Trees, Storm water Best Management Practices and Stream Setback Ordinances.

This was a good informational workshop. I learned a lot about riparian zones and the new laws for new developments in the Kansas City area.

Most of November was spent revising work plans and writing a new one for Red Imported Fire Ants.

On November 24 KDA met with the Kansas Wheat Commission, Kansas Ag Retailers Association and Coop Council to discuss issues we are having with Karnal Bunt sampling. We asked for their help in conveying the need for the survey and to ask the coops for their cooperation. Over the last couple of years more elevators have been denying us to take samples so we needed to get these other entities involved to try and alleviate the problem.

December 3-4 was the National CAPS Conference held in Phoenix, Arizona. Bill Scott and Laurinda Ramonda attended. We arrived on the December 2 and there was a welcome reception for everyone.

Then starting on December 3 there were welcome remarks and the vision of pest detection and CAPS were talked about. We had a panel discussion on the CAPS survey guidelines, Matt Royer spoke about the impact of the 2008 Farm Bill on CAPS, and then a best practice session on agency cooperation. We then had breakout sessions. These sessions were broken into the individual plant boards and discussed commodity-like surveys.

A second breakout session took place consisting of the topics: Analytical tools to conduct CAPS business, Survey methodology and guidelines, Appropriate data to collect and record and Risk-based vs. commodity-like surveys. Then reports from the breakout sessions were discussed. That evening consisted of a PSS/SSC networking session for a couple of hours.

On December 4, Todd Schroeder spoke on the vision of data management for pest detection and CAPS. He unveiled a new program that would pool other data management systems into one but only USDA will have access.

Then we had 40 minute sessions for demonstration on data management systems: PHIS, ISIS and AQAS. After lunch there was a panel discussion on outreach: sharing our mission with industry and the public. Then concurrent sessions ran with SPHD's and SPRO's having a breakout session on managing cooperative agreements at the state level and PSS's and SSC's going to taxonomic and diagnostic demonstrations.

A second breakout session for peer groups occurred. We discussed topics of interest relevant to the perspective of the various roles of the CAPS program. We then had reports from the breakout sessions.

We had a banquet that evening and the meeting was adjourned.

The Great Plains Tree and Forest Invasives Initiative (GPI) met in Lincoln, Nebraska on December 10 and 11. Agenda: December 10 - Overview of GPI accomplishments and upcoming events, Education and outreach for EAB, Potential meetings/workshops/conferences with partner agencies, utilization of EAB produced dead wood material and 4-state response/readiness/preparedness plan for forestry. December 11 – 2008 GPI inventory

discussions, 2009 GPI inventory recommendations and discussions and looking ahead at 2009 redesign application proposal.

I have been working with the GPI since going to Brighton, Michigan last summer for the EAB clinic. This group is very concerned about EAB and other invasives in the Great Plains states.

The Kansas Department of Agriculture had a staff meeting on December 17. The meeting was attended by Katie Howard, Erin Stiers-APHIS, Bill Scott, Sarah Bailey, Laurinda Ramonda, Glenn Salsbury, Jeff Vogel, Tom Sanders, Bill Hilbert and Kitty Crooks.

Bill Scott talked about the budget, building lease, upcoming APHIS emergency exercise, KKSU radio sign-up, EDRR Bark Beetle forestry survey, survey projects, holiday schedule and home office projects. Sarah Bailey spoke about office procedures. Laurinda Ramonda spoke about the CAPS projects, the EAB Readiness & Response Plan, and sign up for garden shows. Glenn Salsbury spoke about insect surveys. Jeff Vogel talked about weeds, weed free forage and IT issues. Kitty Crooks spoke about exports and PCIT. Bill Hilbert and Tom Sanders gave updates on their work areas.

Minutes from CAPS Committee Meeting on December 18, 2008

The state CAPS Committee met on December 18, 2008 at 10:00 am at the Dean's Conference room, 137 Waters Hall at Kansas State University. In attendance were Erin Stiers-USDA-APHIS, Mike Brown-USDA-APHIS, Craig Webb-USDA-APHIS, Doug Jardine-KSU Plant Pathology, Walter Fick-KSU Agronomy, Jon Appel-KDA, Glenn Salsbury-KDA, Sharon Dobesh-KSU Entomology, Katie Howard-KDA, Jeff Vogel-KDA, Bill Scott-KDA, Judy O'Mara-KSU Plant Pathology, Holly Davis-GPDN, Erick DeWolf-KSU Plant Pathology, Tim Todd-KSU Plant Pathology and Laurinda Ramonda-CAPS Coordinator.

Introductions were made and then the current surveys were discussed. We are in the process of switching from a fiscal year to a calendar year for surveys.

For fiscal year July 1, 2008-June 30, 2009:

- Infrastructure (staying on fiscal year).
- Emerald Ash Borer-200 traps set, 100 KDA and 100 USDA. Survey completed with no EAB found.
- Light Brown Apple Moth-50 traps set by KDA. Survey completed with no LBAM found.
- Karnal Bunt survey will occur in June/July.
- Cereal Crop Nematode Survey will start in March and continue to June with 668 samples planned in 25 Counties. Counties: Barber, Barton, Clark, Comanche, Edwards, Ellis,

Ellsworth, Ford, Harper, Hodgeman, Kingman, Kiowa, Lincoln, Osborne, Pawnee, Phillips, Pratt, Reno, Rice, Rooks, Rush, Russell, Smith, Stafford, and Trego.

Workplans submitted for calendar year January 1-December 31, 2009:

- Red Imported Fire Ants will start in May and continue through August in the City of El Dorado in Butler County. This will occur at 10-15 sites with 3 visits to each site.
- Small Grain & Soybean Commodity survey will begin in May and continue through September.

Targets and trapping:

- Silver Y Moth (Autographa gamma), May-September in wheat & soybean fields. Delta trap with pheromone (Z)-7-dodecenyl acetate and (Z)-7-dodecenol lure. Checking trap monthly.
- Egyptian Cotton Leafworm (Spodoptera littoralis), May-September in wheat & soybean fields. Delta trap with synthetic pheromone (Z,E)-(9,11)-tetradecadienyl acetate with a 2 mg pheromone blend lure. Checking trap monthly.
- Old Bollworm (Helicoverpa armigera), May-September in wheat & soybean fields. Shared delta trap with Egyptian Cotton Leafworm with (Z)-11-hexadecenal and (Z)-9-hexadecenal lure. Checking trap monthly.
- Maritime Gardensnail (Cernuella virgata), May-September in wheat & soybean fields. Visually inspect for on plants at edge of field when checking traps monthly.
- Yellow Witchweed (Alectra vogelii), May-September in soybean fields. Visually inspect for when checking traps monthly.
- Soybean Aphid (Aphis glycines), June-September in soybean fields. Visually inspect when plants are actively growing.
- Cereal Leaf Beetle (Oulema melanopus), May-June in wheat fields. Visually inspect for when checking traps.
- Insidious Flower Bug & Minute Pirate Bug (Orius spp.), Damsel Bug (Nabis spp.), Lacewings, and Lady Beetles, May-September in wheat and soybean fields. Sweep nets monthly when checking traps.

County	Commodity	Planted All Purposes (acres)	# of fields to be trapped *	Commodity	Planted All Purposes (acres)	# of fields to be trapped *
Butler	Soybeans	42,300	1	Wheat	67,500	2
Clay	Soybeans	62,000	2	Wheat	96,300	4
Cloud	Soybeans	32,800	1	Wheat	125,600	5
Cowley	Soybeans	30,800	1	Wheat	92,100	1
Dickinson	Soybeans	52,100	2	Wheat	159,600	6
Ellsworth	Soybeans	8,000	1	Wheat	103,900	4
Harper	Soybeans	4,400	1	Wheat	249,300	10
Harvey	Soybeans	49,000	2	Wheat	133,700	5
Jewell	Soybeans	41,800	1	Wheat	144,400	5
Kingman	Soybeans	10,900	1	Wheat	205,100	8
Lincoln	Soybeans	11,700	1	Wheat	110,100	4
Marion	Soybeans	47,700	1	Wheat	144,200	5
McPherson	Soybeans	43,000	1	Wheat	240,900	9
Mitchell	Soybeans	25,000	1	Wheat	202,800	8
Ottawa	Soybeans	19,300	1	Wheat	122,900	4
Reno	Soybeans	43,400	1	Wheat	254,600	10
Republic	Soybeans	61,300	2	Wheat	110,100	4
Rice	Soybeans	31,500	1	Wheat	175,400	7
Saline	Soybeans	25,500	1	Wheat	152,700	6
Sedgwick	Soybeans	40,800	1	Wheat	207,700	8
Sumner	Soybeans	37,000	1	Wheat	399,000	12
Washington	Soybeans	74,700	3	Wheat	100,500	4

^{*} Number of fields surveyed based on acreage of crop planted. 1 field surveyed for every 25,000 acres per county of crop planted. If less than 25,000 acres of crop planted then 1 field will be surveyed. The intent is to survey 22 counties and 159 fields but cost constraints may alter this number.

Source: Planted acres-2007 Kansas Farm Facts from the National Agriculture Statistics Service.

- Canada Thistle Biological Control using Ceutorhynchus litura at Keith Sebelius Lake.
 Release will occur in July with monitoring August-October.
- Spotted Knapweed Biological Control using the lesser knapweed flower weevil (Larinus minutes) and the knapweed root weevil (Cyphocleonus achates). Survey for spotted knapweed in June-July, release lesser knapweed flower weevil in July, release knapweed root weevil in August and monitor in August-October.

Possible surveys in calendar year January 1-December 31, 2009:

- Emerald Ash Borer- 100 traps KDA, 100 traps USDA in May-September/October.
- Light Brown Apple Moth in July-October.

State Specialist Updates:

<u>Jeff Vogel-State Weed Specialist:</u> Hydrilla, a federally quarantined noxious weed, was found in Olathe at Black Bob Park in a pond. He has been meeting with Wildlife & Parks and working on an action plan. This could include draining of pond and/or treatment with an herbicide. This will include surveying downstream for 3 years.

A Canada thistle bio-control workplan has been submitted to APHIS. This is a regulated plant and is a problem at Norton Lake. He will scout where to release, order the Canada thistle stem boring weevil and release it. A reduction of Canada thistle probably won't be seen for about 1 ½ years.

A Spotted knapweed bio-control workplan has been submitted to APHIS. We will survey known areas, delimit area, and scout North and Southeast counties for Spotted knapweed. The release will occur in Nemaha county. Two insects will be ordered and released.

Walt Fick said that Spotted knapweed is spread across southern Missouri.

Jeff also said that insects were re-released for Leafy spurge bio-control and many flea beetles were spotted in the fall survey.

Glenn suggested saving voucher specimens from the releases.

Jon Appel-State Pathology Specialist: A problem from the Cereal Crop Nematode survey was that some of the data didn't mesh and this would be looked at to fix for the spring survey. This is the 15th year for the Karnal Bunt survey. We are making an effort with the stakeholders to get better cooperation from the elevators.

He suggested that when we are in the soybean fields doing the Small Grain & Soybean Commodity survey to take samples for Reniform nematodes.

It was also suggested to look for Caladium mosaic virus in soybean fields.

<u>Tim Todd spoke about the Cereal Crop Nematode survey</u> from the first year. There were 700 samples and 2 extractions occurred for roots and soil. There were no exotics found. He is getting as much information from the survey as possible. He said that the Lesion nematode is spread throughout North America and documented losses have occurred in wheat in western Kansas. Yield losses of 2% occurred due to this pest. He has put in a proposal for control strategies to the Kansas Wheat Commission for this. The Lesion nematode is the #2 pest of wheat.

Glenn Salsbury-state Entomologist: The Large Yellow Underwing is now found across Kansas. It was initially found in 2007 in Meade, Barton and Leavenworth Counties. It is trapped in a black light trap and is a pest of corn, sorghum, home gardens and it is a general feeder. Found by USDA in a Lindgren trap was a European Flea Weevil in Leavenworth County. This pest feeds on the leaf buds of the American Elm.

We most likely will be entering into a USDA Forest Service Agreement to do a Bark Beetle survey. This will involve selecting 7-9 high risk sites with 3 Lindgren traps per site baited with UHR ethanol lure, UHR alpha-pinene & UHR ethanol and a 3 component exotic Ips lure. Taxonomists for the survey will identify all scolytid specimens in traps. The target species surveyed for are *Hylurgops palliates*, *Hylurgus ligniperda*, *Orthotomicus erosus*, *Ips sexdentatus*, *Ips typographus*, *Tomicus minor*, *Tomicus piniperda*, *Trypodendron domesticum*, *Xyleborus* and *Xylosandrus* spp.

The Ash Bark Beetle is found to be killing ash trees in Wichita the last couple of years.

We will be doing trapping for the Forest Service again for endemic and exotics to collect flatheaded borers, weevils, and longhorn beetles in canopy traps.

We have been conducting a Pine Sawyer Beetle survey and have found 2 generations of this pest. They first emerge in May and are active adults until the middle of November. There is an effort to keep the Pine Sawyer Beetle out of western Kansas because much of their windbreaks are pine.

The Pine Pitch Moth has been found in Wichita and Goodland. In Goodland it is in 3 shelterbelts and a golf course. It attacks Austrian and Scotch Pine and we are working on a plan for spraying.

We have had discussions with the Forest Service to look for Black Walnut. There is concern over the Walnut Twig Beetle which causes the 1000 Cankers complex in Walnut trees. There is a possibility it might be attracted to an Ips lure in a canopy trap.

<u>Bill Scott-KDA Program Manager:</u> We will be involved in an Incident Command System (ICS) exercise with USDA. There are 2 exercises per year in the western & eastern region. A year and half ago we said we could do it and they took us up on it for 2008. The meeting spaces will be at the FSA office in Manhattan and the pest will be UG99 in wheat. The table top will occur on January 28 & 29. The full scale exercise will be February 23-27. There will be training on Tuesday, the exercise will occur on Wednesday and the critique will be on Thursday of that week.

Mike Brown said that this is an opportunity to learn what will happen in an emergency situation. He also stated that facilitators from USDA will make the scenario.

Jon Appel suggested that we involve the commodity groups in the exercise.

KSU Specialists Updates:

<u>Doug Jardine</u>: No soybean rust in 2008. It has only showed up in 1 year out of 4. The Texas winter crop of soybeans seems to be heavily infested. We are scrambling to find funding for sentinel plots and the PIPE site. Funding has been found for the PIPE site through 2009. Kansas is a tier 2 state for funding. Kansas had 20 plots last growing season. We can get by with 10 plots especially if we do mobile scouting.

He suggested that we look for Frog Eye Leaf Spot in soybean fields while doing the Small Grain & Soybean Commodity survey. He said it was easy to identify.

He said that we should watch for Goss's Wilt in corn. It was originally in Nebraska but was a problem in 2008 in Iowa, Illinois and Indiana. It is transmitted by splashing water.

Jon Appel said that he would like to see us do a Corn Commodity survey. He also asked how long commodity surveys need to be done.

<u>Erick DeWolf:</u> He informed of us of a wheat virus survey being done and they are monitoring for wheat stem rust.

<u>Judy O'Mara:</u> A wheat virus survey was done in 2007 and 2008. They found that 2/3 of the samples were positive for Wheat Streak and Triticum Mosaic Wheat Streak Virus.

<u>Walt Fick:</u> Weeds of issue are Garlic Mustard and Black Swallowart especially in Morris county.

A contact list that will be used for reviewing the EAB readiness and response plan was passed around. A meeting is planned for review for either February 12 and/or 17. The GPDN said that they could help with funding for outreach for EAB. It was also suggested to contact hunting organizations for input.

Light Brown Apple Moth Survey

All traps were picked up as of October 9 and data entered into ISIS, NAPIS and the state survey database. No LBAM found this year.

Emerald Ash Borer Survey

All traps have been picked up and data entered into ISIS, NAPIS and the state survey database. No EAB found this year.

Listed below are records that have been submitted to NAPIS

Pest: EUROPEAN ELM FLEA WEEVIL

*Data entered for USDA

	Positive	Negative
10/06/2008 LEAVENWORTH County	1	0
State Total	1	0

Pest: LIGHT BROWN APPLE MOTH

	Positive	Negative
DOUGLAS County	0	4
JOHNSON County	0	16
RILEY County	0	10
SEDGWICK County	0	8
SHAWNEE County	0	12
State Total	0	50

Pest: HYDRILLA

	Positive	Negative
9/04/2008 JOHNSON County	1	0
State Total	1	0

Pest: JAPANESE BEETLE

*Data entered for USDA

	Positive	Negative
SEDGWICK County	1	0
SHAWNEE County	1	0
State Total	2	0

Pest: ASIATIC GARDEN BEETLE

*Data was missing in NAPIS for Exotic Beetle Scarab project.

	Positive	Negative
BARTON County	0	16
BUTLER County	0	2
ELLIS County	0	32
JOHNSON County	0	1
RENO County	0	1
	·	·
State Total	0	52

Pest: EUROPEAN CHAFER

^{*}Data was missing in NAPIS for Exotic Beetle Scarab project.

	Positive	Negative
BARTON County	0	16
BUTLER County	0	2
ELLIS County	0	32
JOHNSON County	0	1
RENO County	0	1
State Total	0	52

Pest: ORIENTAL BEETLE

*Data was missing in NAPIS for Exotic Beetle Scarab project.

	Positive	Negative
BARTON County	8	0
ELLIS County	13	0
State Total	21	0

Pest: JAPANESE BEETLE

*Data was missing in NAPIS for Exotic Beetle Scarab project.

	Positive	Negative
BARTON County	8	0
BUTLER County	2	0
ELLIS County	13	0
State Total	23	0

Pest: AFRICANIZED HONEY BEE

	Positive	Negative
9/24/2008 BOURBON County	0	1
12/4/2008 MONTGOMERY County	0	1
State Total	0	1